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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Serial No.: 10/720,567

Art Unit: 2143

Appellants: Justin Russell Bendich et al.

Confirmation No.: 5721

Filed: November 24, 2003

For: APPARATUS, SYSTEM, AND METHOD FOR
MODELING FOR STORAGE PROVISIONING

Examiner: Sikri, Anish

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APPEAL BRIEF UNDER 37 C.F.R. § 41.37(a)

This is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner dated October 18, 2007, which finally rejected claims 1-22 in the above-identified application. The Office date of receipt of Appellant's Notice of Appeal was January 18, 2008. This Appeal Brief is hereby submitted pursuant to 37 C.F.R. § 41.37(a).

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I. REAL PARTY IN INTEREST

The real party in interest is the assignee of the full interest in the invention, International Business Machines Corporation of Armonk, New York.

II. RELATED APPEALS AND INTERFERENCES

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.

III. STATUS OF CLAIMS

Claims 1-22 are pending in the application and were finally rejected in the Office Action mailed on October 18, 2007. In particular, claims 1-6 and 15-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gajjar et al. (U.S. Pat. Pub. No. 2002/0174306, hereinafter Gajjar). Additionally, claims 7-14, 21, and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gajjar and further in view of Dalal et al. (U.S. Pat. Pub. No. 2004/0123063, hereinafter Dalal).

Claims 1-22 are the subject of this appeal. A copy of claims 1-22 as they stand on appeal is set forth in the Claims Appendix.

IV. STATUS OF AMENDMENTS

There were no proposed amendments submitted subsequent to the Final Office Action mailed October 18, 2007.

V. SUMMARY OF CLAIMED SUBJECT MATTER

This section of this Appeal Brief is set forth to comply with the requirements of 37 C.F.R. § 41.37(c)(1)(v) and is not intended to limit the scope of the claims in any way. Exemplary implementations of the limitations of independent claims 1, 11, and 15 are described below.

The language of claim 1 relates to a modeling apparatus for provisioning a storage resource. U.S. Patent Application No. 10/720,567 (hereinafter “ ‘567 Application”), page 12, paragraph 41; Figure 3, modeling apparatus 310. The modeling apparatus includes a monitoring module to monitor a plurality of existing storage resources corresponding to a client. ‘567 Application, page 12, paragraph 42; Figure 3, monitoring module 312. One of the plurality of existing storage resources is designated as a model storage resource. ‘567 Application, page 13, paragraph 45. The modeling apparatus also includes a policy module to store a plurality of storage provisioning policies. ‘567 Application, page 12, paragraph 43; Figure 3, policy module 314. The plurality of storage provisioning policies define a modeling policy. The modeling apparatus also includes a provisioning module to provision a new storage resource for the client according to the modeling policy. ‘567 Application, page 13, paragraph 45; Figure 3, provisioning module 316. The new storage resource is modeled after the model storage resource. ‘567 Application, page 12, paragraph 41.

For ease of reference, the language of claim 1 is reproduced below in typical claim format, with exemplary references (in parentheses) from the ‘567 Application corresponding to the limitations of the claim.

1. A modeling apparatus for provisioning a storage resource (page 12, paragraph 41; Figure 3, modeling apparatus 310), the apparatus comprising:
a monitoring module configured to monitor a plurality of existing storage resources corresponding to a client (page 12, paragraph 42; Figure 3, monitoring module 312), one of the plurality of existing storage resources designated as a model storage resource (page 13, paragraph 45);

a policy module configured to store a plurality of storage provisioning policies, the plurality of storage provisioning policies defining a modeling policy (page 12, paragraph 43; Figure 3, policy module 314); and

a provisioning module configured to provision a new storage resource for the client according to the modeling policy (page 13, paragraph 45; Figure 3, provisioning module 316), the new storage resource modeled after the model storage resource (page 12, paragraph 41).

The language of claim 11 relates to a system for provisioning a storage resource. ‘567 Application, page 8, paragraph 29; Figure 1, storage system 100. The system includes a client, a storage resource manager server, and a storage server. The client has a file system. ‘567 Application, pages 8-9, paragraph 30; Figure 1, clients 104 and 106. The storage resource manager server monitors existing storage resources corresponding to the client. ‘567 Application, page 12, paragraph 42. The storage resource manager server also provisions a new storage resource for the client according to a modeling policy. ‘567 Application, page 13, paragraph 45. The new storage resource is modeled after a model storage resource. ‘567 Application, page 12, paragraph 41. The storage server stores the model storage resource and the new storage resource. ‘567 Application, page 9, paragraph 32.

For ease of reference, the language of claim 11 is reproduced below in typical claim format, with exemplary references (in parentheses) from the ‘567 Application corresponding to the limitations of the claim.

11. A system for provisioning a storage resource (page 8, paragraph 29; Figure 1, storage system 100), the system comprising:

a client having a file system (pages 8-9, paragraph 30; Figure 1, clients 104 and 106);

a storage resource manager server (page 11, paragraph 40) configured to monitor a plurality of existing storage resources corresponding to the client (page 12, paragraph 42) and to provision a new storage resource for the client according

to a modeling policy (page 13, paragraph 45), the new storage resource modeled after a model storage resource (page 12, paragraph 41); and

a storage server configured to store the model storage resource and the new storage resource (page 9, paragraph 32).

The language of claim 15 relates to a computer readable storage medium with computer readable code to carry out a process for provisioning a storage resource. ‘567 Application, page 4, paragraph 13. The process includes monitoring a plurality of existing storage resources corresponding to a client. ‘567 Application, page 12, paragraph 42. One of the plurality of existing storage resources is designated as a model storage resource. ‘567 Application, page 13, paragraph 45. The process also includes storing a plurality of storage provisioning policies. ‘567 Application, page 12, paragraph 43. The plurality of storage provisioning policies define a modeling policy. The process also includes provisioning a new storage resource for the client according to the storage provisioning policies. ‘567 Application, page 13, paragraph 45. The new storage resource is modeled after one of the plurality of existing storage resources. ‘567 Application, page 12, paragraph 41.

For ease of reference, the language of claim 15 is reproduced below in typical claim format, with exemplary references (in parentheses) from the ‘567 Application corresponding to the limitations of the claim.

15. A computer readable storage medium comprising computer readable code configured to carry out a process for provisioning a storage resource (page 4, paragraph 13), the process comprising:
 - monitoring a plurality of existing storage resources corresponding to a client (page 12, paragraph 42), wherein one of the plurality of existing storage resources is designated as a model storage resource (page 13, paragraph 45);
 - storing a plurality of storage provisioning policies (page 12, paragraph 43), the plurality of storage provisioning policies defining a modeling policy; and

provisioning a new storage resource for the client according to the storage provisioning policies (page 13, paragraph 45), the new storage resource modeled after one of the plurality of existing storage resources (page 12, paragraph 41).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Whether claims 1, 2, 15, and 16 are patentable over Gajjar under 35 U.S.C. § 102(b).
- B. Whether claims 3-6 and 17-20 are patentable over Gajjar under 35 U.S.C. § 102(b).
- C. Whether claims 21 and 22 are patentable over the combination of Gajjar and Dalal under 35 U.S.C. § 103(a).
- D. Whether claims 7, 8, and 10-13 are patentable over the combination of Gajjar and Dalal under 35 U.S.C. § 103(a).
- E. Whether claims 9 and 14 are patentable over the combination of Gajjar and Dalal under 35 U.S.C. § 103(a).

VII. ARGUMENT

For the purposes of this appeal, claims 1, 2, 15, and 16 are argued together as a group for purposes of patentability over Gajjar under 35 U.S.C. § 102(b). Claims 3-6 and 17-20 are argued together as a group for purposes of patentability over Gajjar under 35 U.S.C. § 102(b). Claims 21 and 22 are argued together as a group for purposes of patentability over the combination of Gajjar and Dalal under 35 U.S.C. § 103(a). Claims 7, 8, and 10-13 are argued together as a group for purposes of patentability over the combination of Gajjar and Dalal under 35 U.S.C. § 103(a). Claims 9 and 14 are argued together as a group for purposes of patentability over the combination of Gajjar and Dalal under 35 U.S.C. § 103(a).

- A. Claims 1, 2, 15, 16 are patentable over Gajjar because Gajjar does not disclose all of the limitations of the claims.

Appellant respectfully submits that claim 1 is patentable over Gajjar because Gajjar does not disclose all of the limitations of the claim. Claim 1 recites:

A modeling apparatus for provisioning a storage resource, the apparatus comprising:

a monitoring module configured to monitor a plurality of existing storage resources corresponding to a client, one of the plurality of existing storage resources designated as a model storage resource;

a policy module configured to store a plurality of storage provisioning policies, the plurality of storage provisioning policies defining a modeling policy; and

a provisioning module configured to provision a new storage resource for the client according to the modeling policy, the new storage resource modeled after the model storage resource.

(Emphasis added.)

In contrast, Gajjar does not disclose all of the limitations recited in claim 1 because Gajjar does not disclose monitoring a plurality of existing storage resources. Additionally, Gajjar does not disclose model storage resource and modeling a new storage resource after the model storage resource.

- A1. Gajjar does not disclose monitoring a plurality of existing storage resources.

In regard to monitoring a plurality of existing storage resources, the Examiner asserts that Gajjar purportedly discloses this limitation in paragraphs 7-9. However, the indicated paragraphs and the remainder of the disclosure of Gajjar do not disclose monitoring a plurality of existing storage resources. Gajjar merely describes allocating (or provisioning) storage to host computers based upon the needs of applications running on the host computers. Gajjar, paragraph 29, lines 1-3. In order to provision the storage to the host computers, a storage provisioning policy is created based on storage heuristic metadata, which are storage rules or constraints as a function of a storage attribute. Gajjar, paragraph 7, lines 1-7. In other words, the storage provisioning rules are developed based on application requirements and logical rules that are not disclosed as having a relationship with existing storage devices. Once the storage provisioning

policies are in place, the storage provisioning policies are used to select new devices to be provisioned. Gajjar, paragraph 8, lines 1-7.

Additionally, the Examiner relies on the description of storage provisioning policies in paragraph 20. However, these storage provisioning policies are not described in relation to any existing or provisioned storage resources. Furthermore, the Examiner asserts that paragraph 23 purportedly describes monitoring existing storage resources. However, paragraph 23 of Gajjar merely describes a storage area network (SAN) with physical storage devices, but does not describe monitoring the storage devices. Hence, Gajjar merely describes establishing a set of rules to create the storage provisioning policies, but does not describe monitoring existing storage resources to create the storage provisioning policies. In fact, Gajjar does not appear to disclose monitoring existing storage resources at all for any other purpose.

Therefore, Gajjar does not disclose all of the limitations of the claim because Gajjar does not disclose monitoring a plurality of existing storage resources. Accordingly, Appellant respectfully submits that claim 1 of the present application is patentable over Gajjar at least because Gajjar does not disclose monitoring a plurality of existing storage resources.

Appellant respectfully asserts independent claim 15 is also patentable over Gajjar at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, the rejection of claims 15 merely relies on the same reasoning that the Examiner provided for the rejection of claim 1. Here, although the language of claim 15 differs from the language of claim 1, and the scope of claim 15 should be interpreted independently of claim 1, Appellant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 15. Accordingly, Appellant respectfully asserts independent claim 15 is patentable over Gajjar because Gajjar does not disclose the indicated limitations.

Given that claims 2-10 and 16-22 depend from and incorporate all of the limitations of the corresponding independent claims 1 and 15, which are patentable over the cited reference, Appellant respectfully submits that dependent claims 2-10 and 16-22 are also patentable over the cited reference based on allowable base claims. Additionally, each of claims 2-10 and 16-22 may be allowable for further reasons. Accordingly,

Appellant respectfully requests that the rejections of claims 1-6 and 15-22 under 35 U.S.C. §§ 102(b) and 103(a) be withdrawn.

A2. Gajjar does not disclose modeling a new storage resource after a model storage resource.

In regard to the model storage resource limitations, Gajjar also fails to disclose an existing storage resource designated as a model storage resource and modeling a new storage resource after the model storage resource. Although the Examiner asserts that Gajjar purportedly discloses these limitations in paragraphs 7-9, which are discussed above, neither this portion nor the remainder of the disclosure of Gajjar describes a model storage resource and modeling a new storage resource after the model storage resource, as recited in the claim. In contrast, Gajjar merely describes establishing the storage provisioning policies based on the storage heuristic metadata, as described above.

Moreover, even if the storage provisioning policies or the storage heuristic metadata were based on existing storage resources (which Gajjar does not appear to describe), Gajjar nevertheless does not disclose using an existing storage resource as a model storage resource. Additionally, Gajjar does not disclose modeling a new storage resource after the model storage resource, as recited in the claim, because Gajjar merely describes using the storage provisioning policies to select new storage devices for provisioning. Therefore, Gajjar does not disclose all of the limitations of the claim because Gajjar does not disclose a model storage resource and modeling a new storage resource after the model storage resource, as recited in the claim.

Additionally, the Examiner asserts that paragraph 37 of Gajjar purportedly describes modeling a new storage resource based on an existing storage resource. However, paragraph 37 of Gajjar merely describes a unified modeling language (UML) specification for an exemplary storage heuristic metadata. Gajjar does not provide any description of a relationship between the UML specification and any existing storage resources. The UML specification merely relates to a rule for a storage attribute, generally. More specifically, the UML specification is not applicable to modeling a new storage resource after a model storage resource.

Therefore, Gajjar does not disclose all of the limitations of the claim because Gajjar does not disclose modeling a new storage resource after a model storage resource. Accordingly, Appellant respectfully submits that claim 1 of the present application is patentable over Gajjar at least because Gajjar does not disclose modeling a new storage resource after a model storage resource.

Appellant respectfully asserts independent claim 15 is also patentable over Gajjar at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, the rejection of claims 15 merely relies on the same reasoning that the Examiner provided for the rejection of claim 1. Here, although the language of claim 15 differs from the language of claim 1, and the scope of claim 15 should be interpreted independently of claim 1, Appellant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 15. Accordingly, Appellant respectfully asserts independent claim 15 is patentable over Gajjar because Gajjar does not disclose the indicated limitations.

Given that claims 2-10 and 16-22 depend from and incorporate all of the limitations of the corresponding independent claims 1 and 15, which are patentable over the cited reference, Appellant respectfully submits that dependent claims 2-10 and 16-22 are also patentable over the cited reference based on allowable base claims. Additionally, each of claims 2-10 and 16-22 may be allowable for further reasons. Accordingly, Appellant respectfully requests that the rejections of claims 1-6 and 15-22 under 35 U.S.C. §§ 102(b) and 103(a) be withdrawn.

B. Claims 3-6 and 17-20 are patentable over Gajjar because Gajjar does not disclose all of the limitations of the claims.

Given that claims 3-6 and 17-20 depend from and incorporate all of the limitations of the corresponding independent claims 1 and 15, which are patentable over Gajjar, Appellant respectfully submits that dependent claims 3-6 and 17-20 are also patentable over the cited reference based on allowable base claims. Additionally, each of claims 3-6 and 17-20 may be allowable for further reasons, as described below.

In regard to claims 3-6 and 17-20, Appellant respectfully submits each of claims 3-6 and 17-20 is patentable over Gajjar because Gajjar does not disclose all of the

limitations of the claims. Each of the indicated claims recites one or more limitations related to at least one of the following: a storage location, a storage server, a storage pool, and a model group. Although the Examiner relies on Gajjar as purportedly teaching these limitations, the cited portions of Gajjar (paragraphs 7-9 and 23-24) merely describe storage provisioning policies (paragraphs 7-9), in general, and particular types of physical storage devices (paragraphs 23-24). While the general explanation of the storage provisioning process may be useful to explain how storage devices are provisioned in the implementation of Gajjar, the general description of the storage provisioning process does not disclose the specific limitations related to a storage location, a storage server, a storage pool, and a model group, as recited in the indicated claims. Similarly, the list of different types of physical storage devices may provide exemplary physical storage devices used in the implementation of Gajjar, but the list of physical storage devices does not describe a storage location, a storage server, a storage pool, or a model group, as recited in the indicated claims. The extended citation (paragraphs 21-29) in the Advisory Action does not add any additional, relevant support for the Examiner's assertion, within the context of the present application.

Therefore, Gajjar does not disclose all of the limitations of claims 3-6 and 17-20 because Gajjar does not describe a storage location, a storage server, a storage pool, or a model group, as recited in the claims. Accordingly, Appellant respectfully requests that the rejections of claims 3-6 and 17-20 under 35 U.S.C. § 102(b) be withdrawn.

C. Claims 21 and 22 are patentable over the combination of Gajjar and Dalal because the combination of Gajjar and Dalal does not teach all of the limitations of the claims.

Given that claims 21 and 22 depend from and incorporate all of the limitations of independent claim 1, which is patentable over the Gajjar, Appellant respectfully submits that dependent claims 21 and 22 are also patentable over the combination of Gajjar and Dalal based on an allowable base claim. Additionally, each of claims 21 and 22 may be allowable for further reasons, as described below.

In regard to claims 21 and 22, Appellant respectfully submits each of claims 21 and 22 is patentable over the combination of Gajjar and Dalal because the combination of

Gajjar and Dalal does not teach all of the limitations of the claims. Each of the indicated claims recites one or more limitations related to at least one of the following: a storage location, a storage server, a storage pool, and a model group. Although the Examiner relies on Gajjar as purportedly teaching these limitations, the cited portions of Gajjar (paragraphs 7-9 and 23-24) merely describe storage provisioning policies (paragraphs 7-9), in general, and particular types of physical storage devices (paragraphs 23-24). While the general explanation of the storage provisioning process may be useful to explain how storage devices are provisioned in the implementation of Gajjar, the general description of the storage provisioning process does not disclose the specific limitations related to a storage location, a storage server, a storage pool, and a model group, as recited in the indicated claims. Similarly, the list of different types of physical storage devices may provide exemplary physical storage devices used in the implementation of Gajjar, but the list of physical storage devices does not describe a storage location, a storage server, a storage pool, or a model group, as recited in the indicated claims. The extended citation (paragraphs 21-29) in the Advisory Action does not add any additional, relevant support for the Examiner's assertion, within the context of the present application.

Therefore, the cited references do not teach all of the limitations of claims 21 and 22 because Gajjar does not describe a storage location, a storage server, a storage pool, or a model group, as recited in the claims. Accordingly, Appellant respectfully requests that the rejections of claims 21 and 22 under 35 U.S.C. § 103(a) be withdrawn.

D. Claims 7, 8, and 10-13 are patentable over the combination of Gajjar and Dalal because the combination of Gajjar and Dalal does not teach all of the limitations of the claims.

Given that claims 7, 8, and 10 depend from and incorporate all of the limitations of independent claim 1, which is patentable over Gajjar, Appellant respectfully submits that dependent claims 7, 8, and 10 are also patentable over the combination of Gajjar and Dalal based on an allowable base claim. Additionally, each of claims 7, 8, and 10 may be allowable for further reasons. Accordingly, Appellant respectfully requests that the rejections of claims 7, 8, and 10 under 35 U.S.C. § 103(a) be withdrawn.

In regard to independent claim 11, Appellant respectfully asserts independent claim 11 is also patentable over the combination of Gajjar and Dalal at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, the rejection of claims 11 merely relies on the same reasoning that the Examiner provided for the rejection of claim 1. Here, although the language of claim 11 differs from the language of claim 1, and the scope of claim 11 should be interpreted independently of claim 1, Appellant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 11. Accordingly, Appellant respectfully asserts independent claim 11 is patentable over the combination of Gajjar and Dalal because Gajjar does not disclose the indicated limitations. Accordingly, Appellant respectfully requests that the rejection of claim 11 under 35 U.S.C. § 103(a) be withdrawn.

Given that claims 12-14 depend from and incorporate all of the limitations of independent claim 11, which is patentable over the combination of Gajjar and Dalal, Appellant respectfully submits that dependent claims 12-14 are also patentable over the combination of Gajjar and Dalal based on an allowable base claim. Additionally, each of claims 12-14 may be allowable for further reasons. Accordingly, Appellant respectfully requests that the rejections of claims 12-14 under 35 U.S.C. § 103(a) be withdrawn.

E. Claims 9 and 14 are patentable over the combination of Gajjar and Dalal because the combination of Gajjar and Dalal does not teach all of the limitations of the claims.

Given that claims 9 and 14 depend from and incorporate all of the limitations of the corresponding independent claims 1 and 11, which are patentable over Gajjar, either alone or in combination with Dalal, Appellant respectfully submits that dependent claims 9 and 14 are also patentable over the combination of Gajjar and Dalal based on an allowable base claim. Additionally, each of claims 9 and 14 may be allowable for further reasons, as described below.

In regard to claims 9 and 14, Appellant respectfully submits each of claims 9 and 14 is patentable over the combination of Gajjar and Dalal because the combination of Gajjar and Dalal does not teach all of the limitations of the claims. Each of the indicated

claims recites one or more limitations related to at least one of the following: a storage location, a storage server, a storage pool, and a model group. Although the Examiner relies on Gajjar as purportedly teaching these limitations, the cited portions of Gajjar (paragraphs 7-9 and 23-24) merely describe storage provisioning policies (paragraphs 7-9), in general, and particular types of physical storage devices (paragraphs 23-24). While the general explanation of the storage provisioning process may be useful to explain how storage devices are provisioned in the implementation of Gajjar, the general description of the storage provisioning process does not disclose the specific limitations related to a storage location, a storage server, a storage pool, and a model group, as recited in the indicated claims. Similarly, the list of different types of physical storage devices may provide exemplary physical storage devices used in the implementation of Gajjar, but the list of physical storage devices does not describe a storage location, a storage server, a storage pool, or a model group, as recited in the indicated claims. The extended citation (paragraphs 21-29) in the Advisory Action does not add any additional, relevant support for the Examiner's assertion, within the context of the present application.

Therefore, the cited references do not teach all of the limitations of claims 9 and 14 because Gajjar does not describe a storage location, a storage server, a storage pool, or a model group, as recited in the claims. Accordingly, Appellant respectfully requests that the rejections of claims 9 and 14 under 35 U.S.C. § 103(a) be withdrawn.

VIII. CONCLUSION

For the reasons stated above, claims 1-22 are patentable over the cited references. Thus, the rejections of claims 1-22 should be withdrawn. Appellant respectfully requests that the Board reverse the rejections of claims 1-22 under 35 U.S.C. §§ 102(b) and 103(a) and, since there are no remaining grounds of rejection to be overcome, direct the Examiner to enter a Notice of Allowance for claims 1-22.

Respectfully submitted,

Date: April 18, 2008

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IX. CLAIMS APPENDIX

1. (original) A modeling apparatus for provisioning a storage resource, the apparatus comprising:

a monitoring module configured to monitor a plurality of existing storage resources corresponding to a client, one of the plurality of existing storage resources designated as a model storage resource;

a policy module configured to store a plurality of storage provisioning policies, the plurality of storage provisioning policies defining a modeling policy; and

a provisioning module configured to provision a new storage resource for the client according to the modeling policy, the new storage resource modeled after the model storage resource.

2. (original) The apparatus of claim 1, further comprising a specification module configured to allow a user to specify one of the plurality of storage provisioning policies.

3. (original) The apparatus of claim 1, wherein the model storage resource is stored in a storage pool in a storage server and the modeling policy specifies a storage location in which the new storage resource is provisioned.

4. (original) The apparatus of claim 3, wherein the storage location comprises the same storage server as the model storage resource.

5. (original) The apparatus of claim 4, wherein the storage location comprises the same storage pool as the model storage resource.

6. (original) The apparatus of claim 1, wherein the modeling policy specifies a model group to which the model storage resource belongs.

7. (original) The apparatus of claim 6, wherein the model group comprises a volume group used by the client.

8. (original) The apparatus of claim 1, wherein the new storage resource is assigned to a file system and expands a storage capacity of the file system.

9. (original) The apparatus of claim 8, wherein the modeling policy specifies a model group to which the model storage resource belongs, the model group comprising a volume group in which the file system is stored.

10. (original) The apparatus of claim 1, wherein the new storage resource is assigned to a raw logical volume and expands a storage capacity of the raw logical volume.

11. (original) A system for provisioning a storage resource, the system comprising:

a client having a file system;

a storage resource manager server configured to monitor a plurality of existing storage resources corresponding to the client and to provision a new storage resource for the client according to a modeling policy, the new storage resource modeled after a model storage resource; and

a storage server configured to store the model storage resource and the new storage resource.

12. (original) The system of claim 11, further comprising a storage resource manager repository configured to store a plurality of storage provisioning policies, the plurality of storage provisioning policies defining the modeling policy.

13. (original) The system of claim 12, further comprising a user interface module configured to allow a user to access and specify one of the plurality of storage provisioning policies.

14. (previously presented) The system of claim 11, wherein the model storage resource is stored in a storage pool in the storage server and wherein the modeling policy specifies a storage location in which the new storage resource is provisioned and specifies a model group to which the model storage resource belongs.

15. (previously presented) A computer readable storage medium comprising computer readable code configured to carry out a process for provisioning a storage resource, the process comprising:

monitoring a plurality of existing storage resources corresponding to a client, wherein one of the plurality of existing storage resources is designated as a model storage resource;

storing a plurality of storage provisioning policies, the plurality of storage provisioning policies defining a modeling policy; and

provisioning a new storage resource for the client according to the storage provisioning policies, the new storage resource modeled after one of the plurality of existing storage resources.

16. (original) The computer readable storage medium of claim 15, wherein the process further comprises allowing a user to specify one of the plurality of storage provisioning policies.

17. (original) The computer readable storage medium of claim 15, wherein the model storage resource is stored in a storage pool in a storage server and the modeling policy specifies a storage location in which the new storage resource is provisioned.

18. (original) The computer readable storage medium of claim 17, wherein the storage location comprises the same storage server as the model storage resource.

19. (original) The computer readable storage medium of claim 18, wherein the storage location comprises the same storage pool as the model storage resource.

20. (original) The computer readable storage medium of claim 15, wherein the modeling policy specifies a model group to which the model storage resource belongs.

21. (previously presented) The computer readable storage medium of claim 20, wherein the model group comprises a volume group used by the client.

22. (previously presented) The computer readable storage medium of claim 21, wherein the new storage resource corresponds to a file system and wherein the model group comprises a volume group in which the file system is stored.

X. EVIDENCE APPENDIX

There is no evidence submitted with this Appeal Brief.

XI. RELATED PROCEEDINGS APPENDIX

To the best of Appellants' knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.